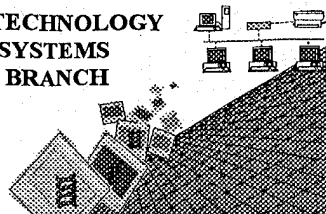


BIOTECHNOLOGY  
SYSTEMS  
BRANCH



**RAW SEQUENCE LISTING**  
**ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/004,378  
Source: 01/8  
Date Processed by STIC: 10/2/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

**<http://www.uspto.gov/web/offices/pac/checker>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

# Raw Sequence Listing Error Summary

## ERROR DETECTED

## SUGGESTED CORRECTION

SERIAL NUMBER: 10/004,398

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics  
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino  
Numbering The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0  
"bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences  
(OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences  
(NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9 Use of n's or Xaa's  
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>  
Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0  
"bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/004,378

DATE: 10/02/2002  
TIME: 14:22:30

Input Set : A:\Cura4791.app  
Output Set: N:\CRF4\10022002\J004378.raw

3 <110> APPLICANT: Li, Li  
4 Furtak, Kazarzyna  
5 Perna, Amanda  
6 Patturajan, Meera  
7 Shimkets, Richard A  
8 Guo, Xiaojia Sasha  
9 Casman, Stacie J  
10 Burgess, Catherine E  
11 Malyankar, Uriel M  
12 Tchernev, Velizar T  
13 Vernet, Corrine A  
14 Spytek, Kimberly A  
15 Agee, Michele  
16 Rastelli, Luca  
17 Shenoy, Suresh G  
18 Grosse, William M  
19 Alsobrook II, John P  
20 Lepley, Denise M  
21 Gerlach, Valerie  
22 Edinger, Schlomit  
23 MacDougall, John R  
24 Peyman, John A  
25 Gunther, Erik  
26 Stone, David J  
27 Ellerman, Karen  
28 Gangolli, Esha A  
30 <120> TITLE OF INVENTION: Novel Human Proteins, Polynucleotides Encoding Them and  
31 Methods of Using the Same  
33 <130> FILE REFERENCE: 21402-179  
35 <140> CURRENT APPLICATION NUMBER: 10/004378  
36 <141> CURRENT FILING DATE: 2002-09-25  
38 <150> PRIOR APPLICATION NUMBER: 60/242,882  
39 <151> PRIOR FILING DATE: 2000-10-24  
41 <150> PRIOR APPLICATION NUMBER: 60/242,765  
42 <151> PRIOR FILING DATE: 2000-10-24  
44 <150> PRIOR APPLICATION NUMBER: 60/300,206  
45 <151> PRIOR FILING DATE: 2001-06-22  
47 <150> PRIOR APPLICATION NUMBER: 60/242,789  
48 <151> PRIOR FILING DATE: 2000-10-24  
50 <150> PRIOR APPLICATION NUMBER: 60/242,768  
51 <151> PRIOR FILING DATE: 2000-10-24  
53 <150> PRIOR APPLICATION NUMBER: 60/242,767  
54 <151> PRIOR FILING DATE: 2000-10-24

Does Not Comply  
Corrected Diskette Needed

pp 3,5-6

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/004,378

DATE: 10/02/2002

TIME: 14:22:30

Input Set : A:\Cura4791.app

Output Set: N:\CRF4\10022002\J004378.raw

56 <150> PRIOR APPLICATION NUMBER: 60/243,622  
 57 <151> PRIOR FILING DATE: 2000-10-26  
 59 <150> PRIOR APPLICATION NUMBER: 60/273,047  
 60 <151> PRIOR FILING DATE: 2001-03-02  
 62 <150> PRIOR APPLICATION NUMBER: 60/243,591  
 63 <151> PRIOR FILING DATE: 2000-10-26  
 65 <150> PRIOR APPLICATION NUMBER: 60/243,950  
 66 <151> PRIOR FILING DATE: 2000-10-27  
 68 <150> PRIOR APPLICATION NUMBER: 60/316,509  
 69 <151> PRIOR FILING DATE: 2001-08-31  
 71 <150> PRIOR APPLICATION NUMBER: 60/243,593  
 72 <151> PRIOR FILING DATE: 2000-10-26  
 74 <150> PRIOR APPLICATION NUMBER: 60/243,502  
 75 <151> PRIOR FILING DATE: 2000-10-26  
 77 <160> NUMBER OF SEQ ID NOS: 191  
 79 <170> SOFTWARE: PatentIn Ver. 2.1

## ERRORED SEQUENCES

2599 <210> SEQ ID NO: 27  
 2600 <211> LENGTH: 1742  
 2601 <212> TYPE: DNA  
 2602 <213> ORGANISM: Homo sapiens  
 2604 <400> SEQUENCE: 27

P.3

2605 cggcgcgctc gacgtctggc gctcctggag gcggcgggcg gagcgcaggg ggcgcgcggc 60  
 2606 ccggggactc gcattccccg gttccccctc caccacacgc ggcctggacc atggacgcca 120  
 2607 gatggtgggc agtgggtggt ctggctgctg tccccctcct aggggcaggt ggggagactc 180  
 2608 ccgaagcccc tccggagtca tggaccacgc tatggttctt ccgatttgtg gtgaatgctg 240  
 2609 ctggctatgc cagctttatg gtacctggct acctcctggt gcagtacttc aggcggaaga 300  
 2610 actacctgga gaccggtagg ggcctctgct tccccctggt gaaagcttgt gtgtttggca 360  
 2611 atgagcccaa ggcctctgat gaggttcccc tggcgccccg aacagaggcg gcagagacca 420  
 2612 ccccgatgtg gcaggccctg aagctgctct tctgtgccac agggctccag gtgtcttatt 480  
 2613 tgacttgggg tgtgctgcag gaaagagtga tgaccgcgag ctatggggcc acagccacat 540  
 2614 caccgggtga gcgctttacg gactcgcagt tcctgggtgt aatgaaccga gtgctggcac 600  
 2615 tgattgtggc tggcctctcc tgtgttctct gcaagcagcc ccggcatggg gcacccatgt 660  
 2616 accggtactc ctttgccagc ctgtccaatg tgcttagcag ctggtgccaa tacgaagctc 720  
 2617 ttaagtctgt cagcttcccc acccaggtgc tggccaaggc ctctaagggt atccctgtca 780  
 2618 tgctgatggg aaagcttgtg tctcggcgca gctacgaaca ctgggagtag ctgacagcca 840  
 2619 cactcatctc cattggggtc agcatgtttc tgctatccag cggaccagag ccccgagct 900  
 2620 cccagccac cacactctca ggcctcatct tactggcagg ttatattgct ttgacagct 960  
 2621 tcacctcaaa ctggcaggat gccctgtttg cctataagat gtcacggtg cagatgatgt 1020  
 2622 ttgggggtcaa tttcttctcc tgctcttca cagtgggctc actgctagaa cagggggccc 1080  
 2623 tactggaggg aaccgccttc atggggcgac acagtgagtt tgctgcccac gccctgctac 1140  
 2624 tctccatctg ctccgcatgt ggccagctct tcatcttita caccattggg cagtttgggg 1200  
 2625 ctgccgtctt caccatcatc atgaccctcc gccaggcctt tgccatcctt ctttctgcc 1260  
 2626 ttctctatgg ccacactgtc actgtggtgg gagggctggg ggtggctgtg gtctttgctg 1320  
 2627 ccctcctgct cagagtctac gcgcggggcc gtctaaagca acggggaaaag aaggctgtgc 1380  
 2628 ctgttgagtc tcctgtgcag aaggtttgag ggtggaaaagg gcctgagggg tgaagtgaag 1440

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/004,378

DATE: 10/02/2002

TIME: 14:22:30

Input Set : A:\Cura4791.app

Output Set: N:\CRF4\10022002\J004378.raw

2629 taggaccctc ccaccatccc cttctgctgt aacctctgag ggagctggct gaaagggcaa 1500  
 2630 aatgcaggtg ttttctcagt atcacagacc agctctgcag caggggattg gggagccag 1560  
 E--> 2631 gaggcagcct tcccttttgc ctttaagtca cccatcttcc angtaagcag tttattctga 1620  
 2632 gccccggggg tagacagtcc tcagtgaggg gttttgggga gtttggggtc aagagagcat 1680  
 2633 aggtaggttc cacagttact cttccacaa gtcccttaa gtcttgccct agctgtgctc 1740  
 2634 tg 1742  
 6544 <210> SEQ ID NO: 101  
 6545 <212> TYPE: PRT  
 6546 <213> ORGANISM: Homo sapiens  
 W--> 6548  
 6548 <400> SEQUENCE: 101  
 E--> 6548 where are amino acids?  
 7305 <210> SEQ ID NO: 111  
 7306 <211> LENGTH: 1027  
 7307 <212> TYPE: PRT  
 7308 <213> ORGANISM: Mus musculus  
 7310 <400> SEQUENCE: 111  
 7311 Met Arg Arg Phe Leu Arg Thr Gly His Asp Pro Ala Arg Glu Arg Leu  
 7312 1 5 10 15  
 7314 Lys Arg Asp Leu Phe Gln Phe Asn Lys Thr Val Glu His Gly Phe Pro  
 7315 20 25 30  
 7317 His Gln Pro Ser Ala Leu Gly Tyr Ser Pro Ser Leu Arg Ile Leu Ala  
 7318 35 40 45  
 7320 Ile Gly Thr Arg Ser Gly Ala Val Lys Leu Tyr Gly Ala Pro Gly Val  
 7321 50 55 60  
 7323 Glu Phe Met Gly Leu His Lys Glu Asn Asn Ala Val Leu Gln Ile His  
 7324 65 70 75 80  
 7326 Phe Leu Pro Gly Gln Cys Gln Leu Val Thr Leu Leu Asp Asp Asn Ser  
 7327 85 90 95  
 7329 Leu His Leu Trp Ser Leu Lys Val Lys Gly Gly Val Ser Glu Leu Gln  
 7330 100 105 110  
 7332 Glu Glu Glu Ser Phe Thr Leu Arg Gly Pro Pro Gly Ala Ala Pro Ser  
 7333 115 120 125  
 7335 Ala Thr Gln Val Thr Glu Ile Leu Pro His Ser Ser Gly Glu Leu Leu  
 7336 130 135 140  
 7338 Tyr Leu Gly Thr Glu Ser Gly Asn Val Leu Val Val Gln Leu Pro Gly  
 7339 145 150 155 160  
 7341 Phe Arg Thr Leu His Asp Arg Thr Ile Cys Ser Asp Glu Val Leu Gln  
 7342 165 170 175  
 7344 Trp Leu Pro Glu Ala Arg His Arg Arg Val Phe Glu Met Val Glu  
 7345 180 185 190  
 7347 Ala Leu Gln Glu His Pro Arg Asp Pro Asn Gln Ile Leu Ile Gly Tyr  
 7348 195 200 205  
 7350 Ser Arg Gly Leu Val Val Ile Trp Asp Leu Gln Gly Ser Arg Ala Leu  
 7351 210 215 220  
 7353 Ser His Phe Leu Ser Ser Gln Gln Leu Glu Asn Ala Ser Trp Gln Arg  
 7354 225 230 235 240  
 7356 Asp Gly Cys Leu Ile Val Thr Cys His Ser Asp Gly Ser His Cys Gln  
 7357 245 250 255

<211> insert this mandatory numeric identifier and its response

see pp 5,6

If this is an intentionally skipped sequence, follow format in

Item 8  
of  
Error  
summary  
sheet

see  
p.6  
for error  
explanation

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/004,378

DATE: 10/02/2002

TIME: 14:22:31

Input Set : A:\Cura4791.app

Output Set: N:\CRF4\10022002\J004378.raw

```

7359 Trp Pro Val Ser Ser Asp Thr Gln Asn Pro Glu Pro Leu Arg Ser Ser
7360                260                265                270
7362 Ile Pro Tyr Gly Pro Phe Pro Cys Lys Ala Ile Thr Lys Ile Phe Trp
7363                275                280                285
7365 Leu Thr Thr Arg Gln Gly Leu Pro Phe Thr Ile Phe Gln Gly Gly Met
7366                290                295                300
7368 Pro Arg Ala Ser Tyr Gly Asp Arg Asn Cys Ile Ser Val Val His Asn
7369 305                310                315                320
7371 Gly Gln Gln Thr Gly Phe Asp Phe Thr Ser Arg Val Ile Asp Phe Thr
7372                325                330                335
7374 Val Leu Ser Glu Ala Asp Pro Ala Ala Ala Phe Asp Asp Pro Tyr Ala
7375                340                345                350
7377 Leu Val Val Leu Ala Glu Glu Glu Leu Val Val Ile Asp Leu Gln Thr
7378                355                360                365
7380 Pro Gly Trp Pro Pro Val Gln Leu Pro Tyr Leu Ala Ser Leu His Cys
7381                370                375                380
7383 Ser Ala Ile Thr Cys Ser His His Val Ser Asn Ile Pro Leu Lys Leu
7384 385                390                395                400
7386 Trp Glu Arg Ile Ile Ala Ala Gly Ser Arg Gln Asn Ser His Phe Ser
7387                405                410                415
7389 Thr Met Glu Trp Pro Ile Asp Gly Gly Thr Ser Leu Ala Pro Pro Pro
7390                420                425                430
7392 Pro Gln Arg Asp Leu Leu Leu Thr Gly His Glu Asp Gly Thr Val Arg
7393                435                440                445
7395 Phe Trp Asp Ala Ser Gly Val Cys Leu Arg Leu Leu Tyr Lys Leu Ser
7396                450                455                460
7398 Thr Val Arg Val Phe Leu Thr Asp Thr Asp Pro Ser Glu Asn Leu Ser
7399 465                470                475                480
7401 Ala Gln Gly Glu Asp Glu Trp Pro Pro Leu Arg Lys Val Gly Ser Phe
7402                485                490                495
7404 Asp Pro Tyr Ser Asp Asp Pro Arg Leu Gly Ile Gln Lys Ile Phe Leu
7405                500                505                510
7407 Cys Lys Tyr Ser Gly Tyr Leu Ala Val Ala Gly Thr Ala Gly Gln Val
7408                515                520                525
7410 Leu Val Leu Glu Leu Asn Asp Glu Ala Ala Glu His Ala Val Glu Gln
7411                530                535                540
7413 Val Glu Ala Asp Leu Leu Gln Asp Gln Glu Gly Tyr Arg Trp Lys Gly
7414 545                550                555                560
7416 His Glu Arg Leu Ala Ala Arg Pro Gly Pro Val Cys Phe Glu Ala Gly
7417                565                570                575
7419 Phe Gln Pro Phe Val Leu Val Gln Cys Gln Pro Pro Ala Val Val Thr
7420                580                585                590
7422 Ser Leu Ala Leu His Ser Glu Trp Arg Leu Val Ala Phe Gly Thr Ser
7423                595                600                605
7425 His Gly Phe Gly Leu Phe Asp His Gln Gln Arg Arg Gln Val Phe Val
7426                610                615                620
7428 Lys Cys Thr Leu His Pro Ser Asp Gln Leu Ala Leu Glu Gly Pro Leu
7429 625                630                635                640
7431 Ser Arg Val Lys Ser Leu Lys Lys Ser Leu Arg Gln Ser Phe Arg Arg

```



VARIABLE LOCATION SUMMARY  
PATENT APPLICATION: US/10/004,378

DATE: 10/02/2002  
TIME: 14:22:33

Input Set : A:\Cura4791.app  
Output Set: N:\CRF4\10022002\J004378.raw

Use of n's or Xaa's(NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:27; N Pos. 1589,1602

Seq#:109; Xaa Pos. 2,9,15,16,20,22,23,24

Seq#:111; Xaa Pos. 716,720



## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/004,378

DATE: 10/02/2002

TIME: 14:22:33

Input Set : A:\Cura4791.app

Output Set: N:\CRF4\10022002\J004378.raw

L:36 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:2631 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:27 ✓  
L:6548 M:282 W: Numeric Field Identifier Missing, <211> is required.  
L:6548 M:301 E: (44) No Sequence Data was Shown, SEQ ID:101 ✓  
L:7099 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:109,  
L:7099 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:109  
L:7099 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:0  
L:7102 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:109  
L:7102 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:109  
L:7102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:16 ✓  
L:7443 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:111